

Subcl B2
radially inwards and relative to said upper and lower sidewall mold members, with said upper segments in abutment with said lower segments.

REMARKS

Claims 1, 2 and 4-6 are pending. By this Amendment, claim 3 is cancelled and claims 1 and 6 are amended.

Entry of the amendments is proper under 37 C.F.R. §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration since the amendments merely amplify issues discussed throughout prosecution; (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Reconsideration based on the following remarks is respectfully requested.

I. The Claims Satisfy All Formal Requirements

The Office Action objects to the claims based on informalities. Claim 3 is cancelled to obviate this objection. Withdrawal of the objection to the claims is respectfully requested.

II. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) over Great Britain Patent No. 1,248,891 (the 891 patent). This rejection is respectfully traversed.

The 891 patent does not disclose or suggest a vulcanizing mold for pneumatic tires including, inter alia, a single cam ring in direct engagement with the upper and lower tread mold members, the single cam ring being displaceable independently of approaching

displacements of the side wall mold members toward each other, to thereby simultaneously displace all of the upper and lower segments radially inwards while the single cam ring remains in direct contact with the upper and lower tread mold members and while the upper and lower segments are in abutment with each other, as recited in claim 1. The 891 also does not disclose a vulcanizing method for vulcanizing pneumatic tires including, inter alia, operating a cam ring while the cam ring is in direct engagement with the upper and lower tread mold members to simultaneously displace segments radially inwards, as recited in claim 6.

Instead, the 891 patent discloses a press mold in which the lower tread mold members 10 are engaged with the upper tread mold members 42, and only the upper tread mold members 42 are engaged with the cam member 43 while the tread mold members are driven radially inwards. Thus, the radial force for driving the lower tread mold members radially inwards or outwards is transmitted from the cam member to the lower tread mold members through the upper tread mold members.

The Office Action asserts that Figs. 4 and 5 of the 891 patent show the cam ring 43 in direct engagement with the lower segments. However, this arrangement occurs only when the segments are fully displaced inwards. In contrast, the single cam ring of the claimed invention remains in direct contact with the lower and upper tread mold members while the single cam ring displaces the upper and lower segments radially inwards. Thus, as compared to the mold of the 891 patent, the vulcanizing mold of the claimed invention is simpler in structure, more readily achieves a sufficient tightening force, and exhibits improved durability.

For at least these reasons, it is respectfully submitted that claims 1 and 6 are patentable over the 891 patent. The dependent claims are likewise patentable over the 891

patent for at least the reasons discussed as well as for the additional features they recite.

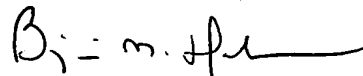
Applicants respectfully request that the rejection under 35 U.S.C. §102 be withdrawn.

III. Conclusion

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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JAO:BMH/gpn

Attachments:

Appendix
Petition for Extension of Time

Date: May 24, 2002

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DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
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APPENDIX

Changes to Claims:

Claim 3 is canceled.

The following are marked-up versions of the amended claims:

1. (Twice Amended) A vulcanizing mold for pneumatic tires, comprising:

upper and lower base plates;

upper and lower sidewall mold members for forming tire sidewall portions, said upper and lower sidewall mold members being attached to said upper and lower base plates, respectively;

upper and lower tread mold members for forming a tire tread portion, said upper and lower tread mold members being attached to said upper and lower base plates, respectively;

said upper and lower tread mold members being constituted of upper segments and lower segments, respectively, said upper and lower segments being displaceable only radially relative to said upper and lower sidewall mold members, respectively; and

a single cam ring in direct engagement with the upper and lower tread mold members, the single cam ring being ~~adapted to be displaced~~ displaceable independently of approaching displacements of said sidewall mold members toward each other, to thereby simultaneously displace all of said upper and lower segments radially inwards while the single cam ring remains in direct engagement with the upper and lower tread mold members and while said upper and lower segments are in abutment with each other.

6. (Twice Amended) A vulcanizing method for vulcanizing pneumatic tires with a vulcanizing mold which comprises: (i) upper and lower base plates; (ii) upper and lower sidewall mold members attached to said upper and lower base plates, respectively; and (iii) upper and lower tread mold members attached to said upper and lower base plates,

respectively, the upper and lower tread mold members being in direct engagement with a cam ring; (iv) said upper and lower tread mold members being constituted of upper segments and lower segments, respectively, which are radially expanded and contracted relative to the upper and lower sidewall mold members, respectively; said method comprising the steps of:

displacing said upper and lower sidewall mold members toward each other so that said upper and lower segments are brought into abutment with each other; and

operating the cam ring while the cam ring remains in direct engagement with the upper and lower tread mold members to simultaneously displace all of said segments radially inwards and relative to said upper and lower sidewall mold members, with said upper segments in abutment with said lower segments.